

November 7, 2013

Gradual Nonfarm Employment Growth Continues in Arizona for 2013; Moderate Improvement in 2014

Introduction

The Office of Employment and Population Statistics (EPS) within the Arizona Department of Administration (ADOA) produces an updated industry forecast every year as additional information becomes available from various data sources. As per the updated forecast for 2013, Arizona's Nonfarm employment will continue to grow gradually. A moderate improvement in Arizona's Nonfarm employment is expected in 2014.

In comparison to the employment forecast released earlier in May 2013, Nonfarm employment growth has been forecast to be slightly better in 2013 with a modest improvement in 2014. An over-the-year gain of 48,500 Nonfarm jobs is expected in 2013 and 59,000 in 2014. In the current forecast, the rate of growth projected for total Nonfarm employment is 1.97 percent in 2013 and 2.35 percent in 2014 (Table 1). A total of 107,500 Nonfarm jobs are forecast to be gained over the two projected years (2013 & 2014). The previous forecast, published in May 2013, projected a 46,500 job (1.89 percent) gain in 2013 and 51,800 job gain (2.07 percent) in 2014; slightly fewer job gains in both 2013 and 2014 than the current forecast is projecting

The overall employment situation in Arizona continues to improve. This is consistent with improvement seen in many economic indicators including population growth. Compared to 2012, population grew faster in 2013 based on our internal EPS ADOA preliminary numbers. Previously released population projections also call for faster population growth in 2014.

Arizona's year-over-year average employment growth rate exceeded the national average in both 2012 and year to date in 2013. Despite the forecasted employment growth in ten of the eleven major sectors in 2013 and 2014, overall Nonfarm employment levels remain well below their prerecession peak. The housing market remains encouraging with continued increase in home prices in Arizona and other states.¹ Private

Table 1

Total Nonfarm Employment
Annual Average Growth Rate

	2012 ^(a)	2013 ^(b)	2014 ^(b)
Arizona	2.0%	2.0%	2.3%
Phoenix MSA ¹	2.4%	2.2%	2.6%
Tucson MSA ²	1.5%	1.7%	2.1%
Balance of State ³	0.6%	1.0%	1.3%

1) Maricopa and Pinal counties

2) Pima County

3) Arizona less Maricopa, Pinal, and Pima counties

a) Historical (BLS Current Employment Statistics)

b) Forecast

Table 1 shows the average annual growth rate in Total Nonfarm employment for Arizona, Phoenix MSA, Tucson MSA, and Balance of State. In 2013, all regions are forecast to have positive annual over-the-year growth rates in Nonfarm employment. Arizona is forecast to grow at 2.0% in 2013. Phoenix is expected to grow faster than the state at 2.2%. However, the projected growth rates for Tucson (1.7%) and the Balance of State (1.0%) are slower than the statewide and Phoenix MSA rates. The expected Nonfarm job gains in 2013 for the Phoenix MSA are 38,900 jobs, for Tucson MSA are 6,200 jobs, and for Balance of State are 3,400 jobs.

Growth rates in 2014 are expected to be higher than 2013 across all regions. Phoenix is forecast to continue growing at a faster pace (2.6%) than Tucson (2.1%), Balance of State (1.3%), and the state overall (2.3%). For 2014 the job gains forecast for Phoenix MSA are 46,700 jobs, Tucson MSA 7,800 jobs, and Balance of State 4,400 jobs. (See tables starting on page 8)

¹ See FRED graphs and data for the variables: all-transactions house price index for the United States (USSTHPI); and all-transactions house price index for Arizona (AZSTHPI). At the website: <http://research.stlouisfed.org/fred2/>.

residential construction sectors have seen an improvement in hiring.² An uptick in hiring has been observed in the financial sectors as well. Although, the economic fundamentals continue to improve, ongoing federal budget battles create uncertainty and hamper growth. Overall, the Nonfarm employment growth rate has been dampened by the effects of sequestration, the payroll tax increase, the October 2013 partial shutdown of federal government and continued conflict over the federal debt ceiling.³ Arizona's reliance on federal government outlays due to its dependence on defense related industries puts the state at further risk if another round of spending cuts were to happen.⁴

The most recent partial federal government shutdown in October 2013 is estimated to reduce fourth quarter US economic growth from 0.6 to 0.3 percentage point, or from \$24 to \$12 billion dollars. The year 2013 is expected to have a real annual average Gross Domestic Product (GDP) growth rate of slightly less than 2.0 percent. The most recent threat of not raising the federal government debt ceiling resulted in a short lived spike in short-term interest rates and a decline in consumer confidence. The shutdown and debt ceiling conflict have increased economic uncertainty and made investment planning more problematic.⁵ In response to the increased economic uncertainty, many corporations are holding their profits as cash instead of investing.⁶

In this forecast update, there are some sectors where the forecast has changed more than others. The major sectors with larger projected job gains or smaller projected job losses include: Natural Resources and Mining, Construction, Information, Professional and Business Services, and Educational and Health Services. On the other hand, the major sectors with smaller forecast job gains or larger projected job losses include: Manufacturing; Trade, Transportation and Utilities; Leisure and Hospitality; Other Services; and Government.

The following factors supporting Arizona's economic growth mentioned in the last forecast continue to persist.

- Continued improvement in real Gross Domestic Product (GDP), real personal income at the state and national levels, employment, and retail sales.⁷

² See The New York Times. Real Estate Boom in Phoenix Brings Its own Problems. Fernanda Santos. October 9, 2013. At the website: www.nytimes.com.

³ As per the Budget Control Act of 2011, the federal government enacted across-the-board budget cuts also known as sequestration followed by a continuing resolution that went into effect in March 2013. The objective was to reduce the federal government deficit and debt levels. Spending was reduced in both civilian and military programs. In addition, the payroll tax cuts of 2 percent expired in December 2012, bringing the rate back to the default of 6.2 percent as of January 2013. For further discussion of the federal budget sequestration and tax increases, see (a) IHS Global Insight. U.S. Forecast for September and October 2012. At the website: www.ihs.com/products/global-insight/index.aspx.

(b) Wells Fargo Economics Group. Monthly Outlook. October 2, 2012. At the website: www.wellsfargo.com/com/research/economics.

(c) Wells Fargo Economics Group. Special Commentary. U.S. Fiscal Primer: The Deficit and Debt. August 2012. At the website: www.wellsfargo.com/com/research/economics.

(d) IHS Global Insight. U. S. Economy Article: The Fiscal Cliff: An Update. December 19, 2012 . At the website: www.ihs.com/products/global-insight/index.aspx.

(e) The Pew Center on the States. Fiscal Federalism Initiative. The Impact of the Fiscal Cliff on the States. November 2012. At the website: www.pewtrusts.org/fiscal-federalism.

⁴ See Wells Fargo Economics Group. Special Commentary. Arizona Economic Outlook: November 2013. Mark Vitner and Michael T. Wolf. November 4, 2013. At the website: www.wellsfargo.com/com/research/economic.

⁵ See: (a) The New York Times. Gridlock Has Cost US Billions, and the Meter is Still Running. Annie Lowrey, Nathaniel Popper and Nelson D. Schwartz. October 16, 2013. At the website: www.nytimes.com.

(b) IHS Global Insight. US Economy: Article. Washington's potential twin fiscal calamities heighten economic and financial market risks. Paul Edelstein and Doug Handler. September 27, 2013. At the website: <http://www.ihs.com/products/global-insight>.

(c) IHS Global Insight. US Economic Outlook. October 2013. At the website: <http://www.ihs.com/products/global-insight>.

⁶ See The Federal Reserve Bank of St. Louis Review. Why Are US Firms Holding So Much Cash?: An Exploration of Cross-Sectional Variation. Juan M. Sanchez and Emircan Yurdagul. July/August 2013. Volume 95(4). Pp. 293-325. At the website: <http://research.stlouisfed.org/>.

⁷ See FRED graphs and data for the variables: real gross domestic product, 1 decimal (GDPC1); real personal income (RPI); real disposable personal income (DSPIC96); total personal income in Arizona (AZOTOT); per capital personal income in Arizona (AZPCPI); and real retail and food services sales (RRSFS). At the website: <http://research.stlouisfed.org/fred2/>.

- Continued employment gains in the private sector, increasing private domestic investment, gradual increase in the index of industrial production and rate of capacity utilization, high levels of corporate profit, and a gradual resurgence in private residential construction permits.⁸
- Continued gradual climb in household net worth and U.S. exports.⁹
- Residential real estate markets in the state of Arizona and the metropolitan areas of Phoenix and Tucson are showing an improvement as measured by various indicators. These include rising levels of building permits. Also, home prices in Arizona have been rising.¹⁰
- While revolving consumer credit levels have remained flat, an expansion of non-revolving consumer credit since 2011 has served as an impetus to expanding economic activity. Consumer sentiment and consumer spending have shown signs of improvement, but the rate of growth has been slowing down.¹¹

Some of the factors that could further dampen the growth of the local economy mentioned in the last forecast continue to persist. However, the positive factors listed above outweigh the uncertainties in the sections described below in support of our forecast:

- Constrained budgets persist for a large majority of households. Despite some job growth and decline in the unemployment rate, many consumers in the U.S. continue to face employment insecurity, lower wages and benefits, high levels of debt, and rising prices for essentials such as food, energy and health care that limits the amount of funds available for discretionary spending.¹²
- The residential real estate market has improved. However with interest rates rising, the demand may slow down.
- Although real business investment continues to grow, the rate of growth has slowed as a consequence of demand uncertainty.¹³

⁸ See FRED graphs and data for the variables: real gross private domestic investment, 3 decimal (GPDIC96); industrial production index (INDPRO); capacity utilization (TCU); capacity utilization – manufacturing (MCUMFN); corporate profits after tax (CP); new private housing units authorized by building permits - in structures with 1 unit (PERMIT1); privately owned housing starts authorized by building permits, 1-unit structures for Arizona (AZBP1FH); and new private housing units authorized by building permit for Arizona (AZBPPRIV) . At the website: <http://research.stlouisfed.org/fred2/>.

⁹ See FRED graphs and data for the variables: total net worth - balance sheet of households and nonprofit organizations (TNWBSHNO); total assets - balance sheet of households and nonprofit organizations (TABSHNO); owners' equity in household real estate - net worth - balance sheet of households and nonprofit organizations (OEHRENWBSHNO); total liabilities - balance sheet of households and nonprofit organizations (TLBSHNO); home mortgages - liabilities - balance sheet of households and nonprofit organizations (HMLBSHNO); debt outstanding domestic nonfinancial sectors - household, consumer credit sector (HCCSDODNS); debt outstanding domestic nonfinancial sectors - household, home mortgage sector (HHMSDODNS); household debt service payments as a percent of disposable personal income (TDSP); and real exports of goods & services, 1 decimal (EXPGSC1). At the website: <http://research.stlouisfed.org/fred2/>.

¹⁰ See FRED graphs and data for the variables: all-transactions house price index for the United States (USSTHPI); all-transactions house price index for Arizona (AZSTHPI); home price index for Phoenix, Arizona (PHXRNSA); new private housing units authorized by building permit for Phoenix-Mesa-Scottsdale, AZ (MSA) (PHOE004BPPRIV); privately owned housing starts authorized by building permits: 1-unit structures for Phoenix-Mesa-Scottsdale, AZ (MSA) (PHOE004BP1FHSA); privately owned housing starts, authorized by building permits, 1-unit structures for Tucson, AZ, MSA, (TUCS004BP1FHSA); new private housing units authorized by building permits for Tucson, AZ, MSA, (TUCS004BPPRIV) ;privately owned housing starts authorized by building permits, 1-unit structures for Arizona (AZBP1FH); and new private housing units authorized by building permit for Arizona (AZBPPRIV); total private construction spending: residential (PRRESCONS); private residential fixed investment (PRFI); and real private residential fixed investment, 3 decimal (PRFIC96). At the website: <http://research.stlouisfed.org/fred2/>.

¹¹ See FRED graphs and data for the variables: total revolving credit owned and securitized, outstanding (REVOLSL); total nonrevolving credit owned and securitized, outstanding (NONREVSL); University of Michigan: consumer sentiment (UMCSNT); and real personal consumption expenditures (PCEC96). At the website: <http://research.stlouisfed.org/fred2/>.

¹² See (a) Global Insight U.S. Forecast for October 2013. At the website: www.ihf.com/products/global-insight/index.aspx.
 (b) Wells Fargo Economics Group. Special Commentary. The U.S. labor Market Is Not Working For Many. Jay H. Bryson and Sarah Watt. August 29, 2013. At the website: www.wellsfargo.com/com/research/economics.
 (c) Wells Fargo Economics Group. Special Commentary. Economic Western Round Up: Western States Leading the Nation's Recovery. Mark Vitner, Michael T. Wolf and Sara Silverman. July 24, 2013. Page 4. At the website: www.wellsfargo.com/com/research/economics.

¹³ See (a) See FRED graphs and data for the variable: real gross private domestic investment, 3 decimal (GPDIC96). At the website: <http://research.stlouisfed.org/fred2/>.

(b) Wells Fargo Economics Group. Special Commentary. Business Spending Mid-Year Outlook.Tim Quinlan and Sarah Watt. June 28, 2013. At the website: www.wellsfargo.com/com/research/economic.

(c) IHS Global Insight. U.S. Economic Outlook for October 2013. At the website: www.ihf.com/products/global-insight/index.aspx.

- Public sector fiscal consolidation through spending reductions (March 2013), tax increases (Jan 2013), partial federal government shutdown (October 2013) have increased economic uncertainty and reduced spending. With another round of spending cuts looming, the future remains uncertain.
- Reduced spending in both civilian and military programs, coupled with increased taxes, could lower the aggregate demand in the U.S. economy, thereby slowing the rate of economic and employment growth.¹⁴
- Arizona is one of the states in the nation most vulnerable to federal government expenditure reductions because of the large proportion of military spending in the state's economy.¹⁵ Reductions in federal government expenditures are projected to have the greatest impact in the following major industry sectors: Manufacturing; Retail Trade; Professional and Business Services; and Government. Besides the federal government, state and local governments continue to have budget problems.¹⁶

In addition to the factors listed above, there are some grounds for limited optimism on the international front:

- A gradual recovery is emerging in the Euro Monetary Zone economies, despite the tightening of the fiscal policy in some of these economies, which could have a slight stimulating effect. Countries in the Euro Monetary Zone serve as important markets for U.S. exports. They also serve as a source of foreign investment funds for U.S. financial markets. However, Arizona's trade with the European economies is limited.¹⁷
- Asia and Latin America are projected to have a slight increase in economic growth which might bolster demand for exports fabricated in the US and Arizona.¹⁸

Arizona Industry Employment Projections (2012 – 2014)

Table 2 (see pg. 5) describes the average over-the-year percentage change for each sector for 2012, 2013, and 2014, where 2012 is the base year and 2013 and 2014 are forecast years. Job gains are projected in all major sectors of the Arizona economy with the exception of one sector during the forecast time period. This would suggest a continuous improvement in the rate of Nonfarm employment gains in 2013 and 2014 compared to 2012.

¹⁴ See (a) Global Insight U.S. Forecast for April 2013. at the website www.ihs.com/products/global-insight/index.aspx.

(b) Wells Fargo Economics Group. Special Commentary. Economic Impact of Sequestration. February 25, 2013. At the website: www.wellsfargo.com/com/research/economic.

(c) Wells Fargo Economics Group. Special Commentary. Sequestering Economic Growth?. John E. Silvia and Michael A. Brown. September 27, 2013. At the website: www.wellsfargo.com/com/research/economic.

¹⁵ See: (a) Wells Fargo Economics Group. Special Commentary. Sequestration: Which States Are Most Vulnerable?. February 18, 2013. At the website: www.wellsfargo.com/com/research/economic.

(b) Wells Fargo Economics Group. Special Commentary. Economic Impact of Sequestration. February 25, 2013. At the website: www.wellsfargo.com/com/research/economic.

(c) Wells Fargo Economics Group. Special Commentary. Arizona Economic Outlook: November 2013. Mark Vitner and Michael T. Wolf November 4, 2013. At the website: www.wellsfargo.com/com/research/economic.

¹⁶ See (a) Wells Fargo Economics Group. Special Commentary. 2013 Local Budget Outlook: A Turnaround in Revenue, But Uncertainty Remains. John E. Silvia and Michael A. Brown. August 26, 2013. At the website: www.wellsfargo.com/com/research/economics.

(b) Wells Fargo Economics Group. Joint Economics and Municipal Commentary. FY 2014 State Budgets and Beyond. John E. Silvia, Natalie Cohen, Michael A. Brown and Roy Eappen. July 9, 2013. At the website: www.wellsfargo.com/com/research/economics.

(c) Center on Budget and Policy Priorities. Policy Basics: Where Do Our State Tax Dollars Go? April 12, 2013. At the website: www.cbpp.org/reports.

(d) Center on Budget and Policy Priorities. Policy Basics: The ABC's of State Budgets. February 7, 2013. At the website: www.cbpp.org/reports.

¹⁷ See (a) IHS Global Insight. U.S. Economic Outlook for October 2013. At the website: www.ihs.com/products/global-insight/index.aspx.

(b) Wells Fargo Economics Group. Monthly Outlook. October 9, 2013. At the website: www.wellsfargo.com/com/research/economics.

(c) Wells Fargo Economics Group. Special Commentary. Arizona: Back from the Brink. March 15, 2013. At the website: www.wellsfargo.com/com/research/economics.

¹⁸ See (a) IHS Global Insight U.S. Forecast for October 2013. At the website: www.ihs.com/products/global-insight/index.aspx.

(b) Wells Fargo Economics Group. Monthly Outlook. April 10, 2013. At the website: www.wellsfargo.com/com/research/economics.

Figure 1 (see pg. 6) describes the sectors of the Arizona economy with projected gains and losses in employment from 2012 to 2014. Gains in ten sectors and a loss in one sector are expected over the two year period. **Figure 2** lists job gains by percent for all sectors.

For the 2012 to 2014 forecast time period, the major sectors with the largest projected employment gains are: Professional and Business Services (32,400 jobs); Construction (17,000 jobs); Educational and Health Services (14,500 jobs); Leisure and Hospitality (13,300 jobs); Financial Activities (11,100 jobs); Trade, Transportation and Utilities (8,500 jobs); Government (5,900 jobs); and Manufacturing (2,400 jobs). Smaller gains are forecast for Information (1,600 jobs) and Natural Resources and Mining (1,200 jobs) sectors. The only major sector with a projected loss in employment for 2012 to 2014 is Other Services sector (500 jobs).

During the two-year forecast time period, the major industry sectors arranged in the descending order of growth rates are: Construction (14.7 percent); Natural Resources and Mining (9.8 percent); Professional and Business Services (9.1 percent); Financial Activities (6.3 percent); Leisure and Hospitality (5.0 percent); and Information (4.2 percent). Relatively, slower rates of growth are projected for Educational and Health Services (4.0 percent); Trade, Transportation and Utilities (1.8 percent); Manufacturing (1.5 percent); and Government (1.4 percent). The only major sector with forecast job losses is Other Services (-0.6 percent).

Professional and Business Services (PBS): The PBS sector is projected to have an increase of 14,300 jobs (4.0 percent) in 2013 and 18,100 jobs (4.9 percent) in 2014. The sub-sectors with the largest projected job gains over the projection period include Employment Services along with Professional, Scientific and Technical Services. Business firms are expected to hire contingent labor as a lower-cost means to expand output during these uncertain times. All sub-sectors in PBS are projected to gain employment during the two-year forecast period.

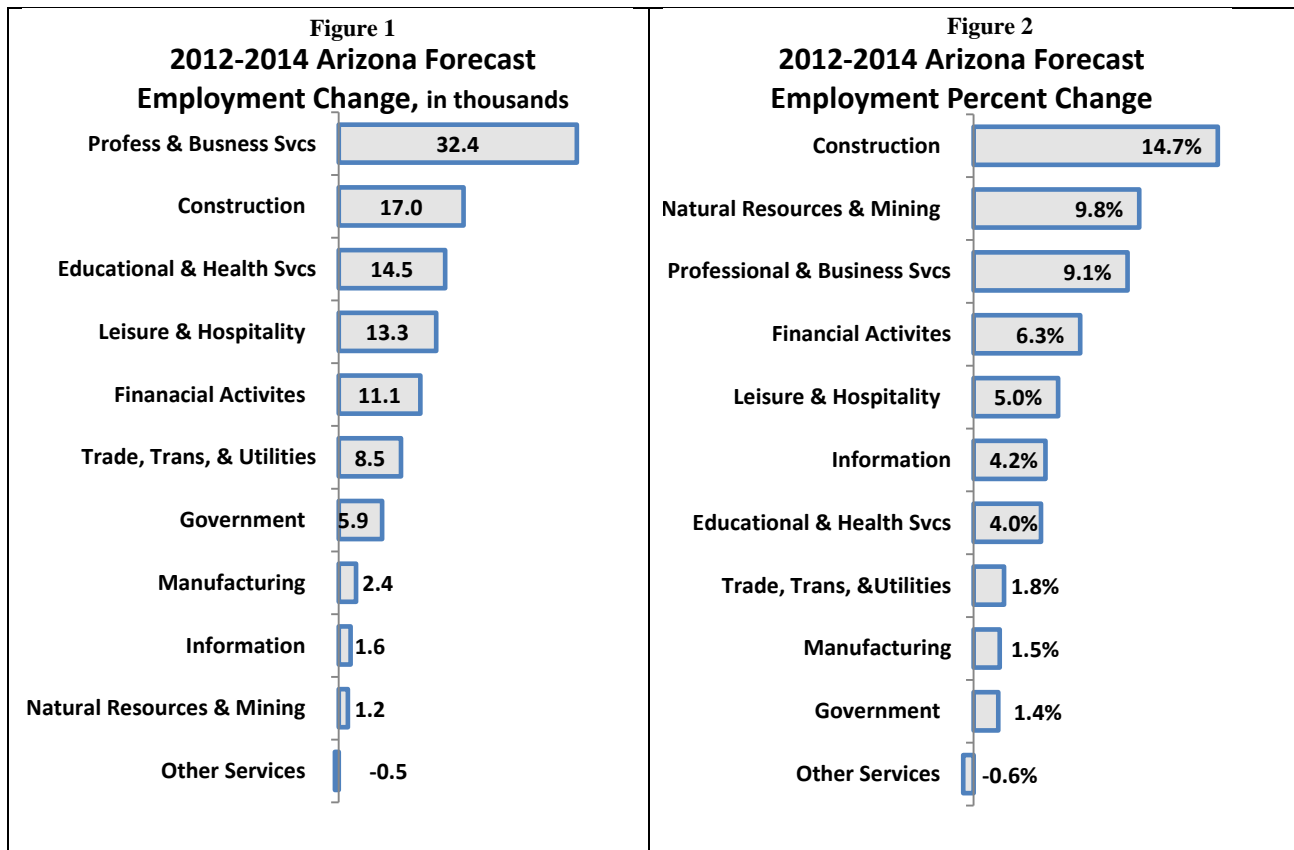
Construction: This sector is forecast to gain 8,200 jobs (7.1 percent) in 2013 and 8,800 jobs (7.1 percent) in 2014. Job gains are forecast across all Construction sub-sectors with the largest employment gains expected in the Specialty Trades sub-sector. One indicator showing increased activity in private residential construction is single-family housing permits, which has increased by 14.2 percent year-to-date in 2013.¹⁹ The Western Blue Chip Consensus forecast for single-family housing permits of 23.3 percent for 2013 and 29.3 percent in 2014 also supports an employment increase in the Construction sector.²⁰ Other factors supporting growth in this sector are: home repair and maintenance activities, new infrastructure projects such as the expansion of light rail in Phoenix, and the development of new metal-ore mines.

Table 2

Arizona Sector Employment Average Annual Over-the-Year Change			
	2012(a)	2013(b)	2014(b)
Total Nonfarm	2.0%	2.0%	2.3%
Construction	4.3%	7.1%	7.1%
Natural Resources & Mining	9.5%	6.5%	3.1%
Profess & Business Svcs	2.5%	4.0%	4.9%
Financial Activities	3.0%	3.7%	2.5%
Information	3.2%	2.6%	1.5%
Leisure & Hospitality	2.9%	2.1%	2.8%
Educational & Health Svcs	2.9%	1.6%	2.4%
Government	0.6%	0.7%	0.7%
Trade, Trans. & Utilities	1.1%	0.6%	1.2%
Manufacturing	3.1%	0.6%	1.0%
Other Services	-2.6%	-0.6%	0.0%
a) Historical (BLS Current Employment Statistics)			
b) Forecast			

¹⁹ See FRED graphs and data for the variable: Privately Owned Housing Starts Authorized by Building Permits: 1-Unit Structures for Arizona AZBP1FH. At the website: <http://research.stlouisfed.org/fred2/>.

²⁰ See Western Blue Chip Economic Forecast. Arizona Single-family Housing Permits for 2013-2014. Oct 1, 2013. At the website: <http://legacy.wpcarey.asu.edu/bluechip/western/arizona.cfm>.



Educational and Health Services (EHS): The EHS sector is forecast to gain 5,700 jobs (1.6 percent) in 2013 and 8,800 jobs (2.4 percent) in 2014. The largest projected increase in employment is forecast in the sub-sector of Ambulatory Health Care Services. Increases are also expected in Nursing and Residential Care Services and Social Assistance sectors. Hospitals are projected to have no change in employment levels in 2013 and have slight job gains in 2014. Expansions in state spending through the provisions of the federal 2010 Affordable Care Act are projected to bolster employment growth in the health care services related sectors.²¹ Federal government budget reductions, especially the sequester, the partial shutdown and conflict over increasing the debt ceiling, have the potential of curtailing employment growth in the health care sectors. Sub-sectors within Private Educational Services are forecast to have reductions in employment. More individuals leave school, to re-enter the workforce as the economy gradually improves, or shun the pursuit of higher education to avoid acquiring non-payable levels of student debt.²²

Leisure and Hospitality (L&H): The L&H sector is projected to have an increase of 5,700 jobs (2.1 percent) in 2013 and 7,600 jobs (2.8 percent) in 2014. The sub-sectors with the largest projected job gains

²¹ See (a) The Los Angeles Times. Arizona Gov. Jan Brewer pushes through Obama's Medicaid expansion. Cindy Carcamo. June 14, 2013. At the website: <http://articles.latimes.com/print/2013/jun/14/nation/la-na-nn-ff-jan-brewer-arizona-medicaid-20130613>.

(b) Grand Canyon Institute. Arizona's Medicaid Options under the Affordable Care Act: Fiscal and Economic Consequences. Dave Wells, Ph.D., Research Director, Grand Canyon Institute. Policy Paper. September 26, 2012. At the website: <http://grandcanyoninstitute.org/>.

²² See (a) See FRED graphs and data for the variable, FGCCSAQ027S, the asset level of federal government student loan consumer credit. At the website: <http://research.stlouisfed.org/fred2/>.

(b) Federal Reserve Bank of New York. The Financial Crisis at the Kitchen Table: Trends in Household Debt and Credit. Meta Brown, Andrew Haughwout, Donghoon Lee and Wilbert van der Klaauw. Current Issues in Economics and Finance. Volume 19:2. 2013. Pp. 1-10. At the website: www.newyorkfed.org/research/current_issues.

(c) The Wall Street Journal. Student Loan Pretenders: New Evidence that Subsidized Debt is Harming Borrowers. July 10, 2013. At the website: <http://online.wsj.com>.

(d) The Guardian. Helaine Olen's Money Blog: Want to fix the US student loan crisis?. July 11, 2013. At the website: <http://www.guardian.co.uk/us-money-blog>.

(e) The Guardian. Helaine Olen's Money Blog: The curse of student loan debt: owe while you're young, live when you're old. August 8, 2013. At the website: <http://www.guardian.co.uk/us-money-blog>.

are Food Services and Drinking Places. Fewer job gains are forecast in the sub-sectors of Accommodations and Arts, Entertainment and Recreation. Sequestration cuts, a tighter fiscal environment, and the partial federal government shutdown are expected to limit business and recreational related travel. However, domestic and international tourism demand is projected to bolster employment in the Leisure and Hospitality sector.

Financial Activities (FA): This sector is projected to have an employment increase of 6,500 jobs (3.7 percent) in 2013 and 4,600 jobs (2.5 percent) in 2014. The job growth in Financial Activities over the two-year period is projected to slow in 2014 when compared to 2013. The employment forecast is reinforced by rising interest rates in 2014, which could hinder employment growth in this sector.²³ During the 2013 and 2014 forecast time frame, the sub-sectors with the largest projected gains in employment are: Credit Intermediation and Monetary Authorities; Insurance, Funds and Trusts; Real Estate, Rental and Leasing; and Securities, Commodities Contracts, and Investments.

Trade, Transportation and Utilities (TTU): The TTU sector is forecast to gain 2,900 jobs (0.6 percent) in 2013 and 5,500 jobs (1.2 percent) in 2014. Retail Trade is the TTU sub-sector with the largest projected employment gain, with the majority of these gains coming from Motor Vehicles and Parts Dealers. Fewer gains are forecast in Wholesale Trade, Transportation and Warehousing, and Utilities sectors. Within Retail Trade sub-sectors, all components are projected to post employment gains. However, Air Transportation, which is a sub-sector of Transportation, and Warehousing and Utilities, are forecast to have job losses as a consequence of industry consolidation and looming budget cuts.

Government: This sector is forecast to gain 2,900 jobs (0.7 percent) in 2013 and 3,000 jobs (0.7 percent) in 2014. The majority of projected increases in employment from 2012 to 2014 are expected in the sub-sectors of public education at the State level,²⁴ and the education and non-education sectors at the Local Government level. However, job losses are projected for the Federal Government and the non-education sectors of the State Government.

Manufacturing: This sector is projected to have an employment increase of 900 jobs (0.6 percent) in 2013 and 1,500 jobs (1.0 percent) in 2014. During the two-year forecast, job gains are anticipated in Durable Goods sub-sectors Fabricated Metal Products and Aerospace Products and Parts, with the exception of Computer and Electronic Products. Non-Durable Goods sector is also forecast to gain jobs. In the face of continued reductions in federal spending, defense-related industries are expected to have leaner staffing levels.

Information: This sector is projected to have a gain in employment of 1,000 jobs (2.6 percent) in 2013 and an increase in employment of 600 jobs (1.5 percent) in 2014. During the 2012 to 2014 projections time frame, slowing job gains are forecast in both the Telecommunications and Non-Telecommunications sub-sectors.

Natural Resources and Mining (NRM): The NRM sector is forecast to gain 800 jobs (6.5 percent) in 2013 and 400 jobs (3.1 percent) in 2014. From 2012 to 2014, slowing job gains are projected in the Natural Resource and Mining sub-sectors. Gradual recoveries in the Euro Monetary Zone, Asia, and Latin American economies are expected to bolster export demand. Employment growth might be dampened with the price of copper falling 7.2 percent year-to-date in 2013.²⁵

²³ IHS Global Insight. U.S. Economic Outlook for October 2013. At the website: www.ihs.com/products/global-insight/index.aspx.

²⁴ See State of Arizona Board of Regents. Table 2:Enrollments for Fall Semester: Headcounts and Full-Time Equivalents (21st Day). Academic Affairs Committee Meeting. December 5, 2012. Agenda Item #6A. Page 5.

²⁵ See Index Mundi. Copper Futures End of Day Settlement Price. At the website: <http://www.indexmundi.com/commodities/?commodity=copper&months=60>.

Other Services (OS): OS is forecast to lose 500 jobs (-0.6 percent) in 2013 and remain flat in 2014. Continued employment uncertainty, reduced wages and benefits, large consumer and mortgage debt, rising food, energy and health care costs have reduced the amount consumers give as charitable contributions to various establishments. These establishments include foundations or charitable trusts, religious, professional, and civic organizations, etc. These projected losses in employment in the OS sector reflect the reductions in revenues to these establishments.

Conclusion

As per the updated forecast, Arizona is projected to gain 107,500 Nonfarm jobs, representing a growth rate of 4.4 percent, over the two projected years of 2013 and 2014. An over-the-year gain of 48,500 jobs is projected in 2013 and 59,000 jobs in 2014. The rate of growth projected for Nonfarm employment is 1.97 percent in 2013 and 2.35 percent in 2014. Arizona's Nonfarm employment will continue to grow gradually in 2013 with moderate improvement in 2014. This is consistent with improvements seen in many economic indicators.

While the US has regained 78 percent of the jobs lost since its prerecession peak, Arizona has recovered only 47 percent of lost jobs. Despite this, the fundamentals of Arizona's economy continue to show signs of growth.

Ten of the eleven major sectors continue to see growth in the forecast time period. The housing market remains encouraging with continued increase in home prices in Arizona and other states. Arizona's population, compared to 2012, grew faster in 2013 based on our internal EPS ADOA preliminary numbers.

In comparison to the forecast for 2012 to 2014 released in May 2013, the following major sectors have larger employment gains in the updated forecast: Natural Resources and Mining; Construction; Information; Professional and Business Services; and Educational and Health Services. The sectors with smaller job gains in the updated forecast are: Manufacturing; Trade, Transportation and Utilities; Leisure and Hospitality; Other Services; and Government.

All sectors of the Arizona economy are projected to gain jobs during the 2012-2014 forecast time period with the exception of Other Services sector. For the 2012 to 2014 forecast time period, the major sectors with projected employment gains in descending order include: Professional and Business Services (32,400 jobs); Construction (17,000 jobs); Educational and Health Services (14,500 jobs); Leisure and Hospitality (13,300 jobs); Financial Activities (11,100 jobs); Trade, Transportation and Utilities (8,500 jobs); Government (5,900 jobs) and Manufacturing (2,400 jobs). Smaller gains are forecast for the Information (1,600 jobs) and Natural Resources and Mining (1,200 jobs) sectors. The only major sector with a projected loss in employment for 2012 to 2014 is Other Services sector (-500 jobs).

The growth rate over the 2012-2014 forecast time period for various sectors in descending order of magnitude are: Construction (14.7 percent); Natural Resources and Mining (9.8 percent); Professional and Business Services (9.1 percent); Financial Activities (6.3 percent); Leisure and Hospitality (5.0 percent); and Information (4.2 percent). Relatively, slower rates of growth is projected for Educational and Health Services (4.0 percent); Trade, Transportation and Utilities (1.8 percent); Manufacturing (1.5 percent); and Government (1.4 percent). Other Services is the only major sector with forecast job losses (-0.6 percent).

However, the state faces many headwinds with respect to federal government uncertainty. Public sector fiscal consolidation through spending reductions (sequestration) and payroll tax increases went into effect early this year. Partial shutdown of the federal government followed in October 2013. The ongoing federal budget battles over the federal debt ceiling have created uncertainty and an environment not very conducive to growth. Arizona's reliance on federal government outlays due to its dependence on defense related industries puts the state at further risk if another round of spending cuts were to happen.

There are risks from consumers that could add uncertainty to the forecast. Despite some job growth and lowering in the unemployment rate, many consumers in the U.S. continue to face employment insecurity, lower wages and high debt. Constrained budgets persist for a large majority of households inhibiting their spending ability.

In the domestic economy, federal, state, and local budgets continue to be constrained, which could inhibit growth. Although the residential real estate market has improved, the commercial real estate sector continues to be weak, which could pose additional risk.

There are many positive indicators suggesting improvement in the overall economy. A gradual recovery has begun in the Euro Monetary Zone, Asia, and Latin American economies. On the domestic front, economic indicators such as: GDP, employment, industrial production, wholesale and retail sales, capacity utilization rate, household net worth, rising income levels, increasing consumer spending, gradual improvements in residential real estate markets, and increasing levels of private domestic investment among others suggest economic improvement. However there are also risks associated with uncertainties as mentioned above. Overall, with Nonfarm employment gains projected across ten of the eleven major sectors in 2012-2014, this forecast suggests positive economic trends overshadow potential risks.

Arizona Employment Forecast

(In Thousands)

	Historical			Forecast	
	2010	2011	2012	2013	2014
Total Nonfarm Employment	2385.8	2411.4	2460.3	2508.8	2567.8
<i>Numerical Change</i>	-46.8	25.6	48.9	48.5	59.0
<i>Percent Change</i>	-1.9%	1.1%	2.0%	2.0%	2.3%
Manufacturing	148.5	150.5	155.2	156.1	157.6
<i>Numerical Change</i>	-5.3	2.0	4.7	0.9	1.5
<i>Percent Change</i>	-3.4%	1.3%	3.1%	0.6%	1.0%
Natural Resources & Mining	10.9	11.6	12.7	13.5	13.9
<i>Numerical Change</i>	-0.2	0.7	1.1	0.8	0.4
<i>Percent Change</i>	-1.8%	6.4%	9.5%	6.5%	3.1%
Construction	111.5	110.9	115.7	123.9	132.7
<i>Numerical Change</i>	-17.2	-0.6	4.8	8.2	8.8
<i>Percent Change</i>	-13.4%	-0.5%	4.3%	7.1%	7.1%
Trade, Transportation, & Utilities	467.8	473.1	478.5	481.4	487.0
<i>Numerical Change</i>	-10.6	5.3	5.4	2.9	5.5
<i>Percent Change</i>	-2.2%	1.1%	1.1%	0.6%	1.2%
Information	36.4	37.0	38.2	39.2	39.8
<i>Numerical Change</i>	-1.6	0.6	1.2	1.0	0.6
<i>Percent Change</i>	-4.2%	1.6%	3.2%	2.6%	1.5%
Financial Activities	167.6	171.3	176.5	183.0	187.6
<i>Numerical Change</i>	-2.5	3.7	5.2	6.5	4.6
<i>Percent Change</i>	-1.5%	2.2%	3.0%	3.7%	2.5%
Professional & Business Services	339.8	345.9	354.4	368.7	386.8
<i>Numerical Change</i>	-6.3	6.1	8.5	14.3	18.1
<i>Percent Change</i>	-1.8%	1.8%	2.5%	4.0%	4.9%
Educational & Health Services	344.8	355.9	366.2	371.9	380.7
<i>Numerical Change</i>	10.9	11.1	10.3	5.7	8.8
<i>Percent Change</i>	3.3%	3.2%	2.9%	1.6%	2.4%
Leisure & Hospitality	253.9	259.3	266.7	272.4	280.0
<i>Numerical Change</i>	-2.1	5.4	7.4	5.7	7.6
<i>Percent Change</i>	-0.8%	2.1%	2.9%	2.1%	2.8%
Other Services	88.2	87.9	85.6	85.1	85.1
<i>Numerical Change</i>	-5.2	-0.3	-2.3	-0.5	0.0
<i>Percent Change</i>	-5.6%	-0.3%	-2.6%	-0.6%	0.0%
Government	416.3	408.1	410.7	413.6	416.6
<i>Numerical Change</i>	-6.7	-8.2	2.6	2.9	3.0
<i>Percent Change</i>	-1.6%	-2.0%	0.6%	0.7%	0.7%

Note - All figures are annual averages rounded to the nearest tenth for percentage change or the nearest hundred for employment. Numerical change and percent change are based on the difference from the previous year's annual average employment.

Phoenix-Mesa-Glendale* MSA Employment Forecast

(In Thousands)

	Historical			Forecast	
	2010	2011	2012	2013	2014
Total Nonfarm Employment	1690.4	1715.6	1757.1	1796.0	1842.7
<i>Numerical Change</i>	-33.1	25.2	41.5	38.9	46.7
<i>Percent Change</i>	-1.9%	1.5%	2.4%	2.2%	2.6%
Manufacturing	110.7	112.8	117.0	117.7	118.9
<i>Numerical Change</i>	-4.2	2.1	4.2	0.7	1.2
<i>Percent Change</i>	-3.7%	1.9%	3.7%	0.6%	1.0%
Natural Resources & Mining	3.0	3.3	3.7	3.7	3.7
<i>Numerical Change</i>	-0.1	0.3	0.4	0.0	0.0
<i>Percent Change</i>	-3.2%	10.0%	12.1%	0.0%	0.0%
Construction	82.4	83.1	87.8	94.0	100.7
<i>Numerical Change</i>	-13.6	0.7	4.7	6.2	6.7
<i>Percent Change</i>	-14.2%	0.8%	5.7%	7.1%	7.1%
Trade, Transportation, & Utilities	345.9	350.1	356.8	358.8	362.6
<i>Numerical Change</i>	-8.4	4.2	6.7	2.0	3.8
<i>Percent Change</i>	-2.4%	1.2%	1.9%	0.6%	1.1%
Information	27.4	28.4	29.5	30.5	31.1
<i>Numerical Change</i>	-1.5	1.0	1.1	1.0	0.6
<i>Percent Change</i>	-5.2%	3.6%	3.9%	3.4%	1.8%
Financial Activities	138.9	143.0	147.6	153.3	157.2
<i>Numerical Change</i>	-2.0	4.1	4.6	5.7	3.9
<i>Percent Change</i>	-1.4%	3.0%	3.2%	3.8%	2.5%
Professional & Business Services	270.7	276.4	283.7	296.2	312.2
<i>Numerical Change</i>	-4.3	5.7	7.3	12.5	15.9
<i>Percent Change</i>	-1.6%	2.1%	2.6%	4.4%	5.4%
Educational & Health Services	239.1	247.6	255.1	259.3	265.9
<i>Numerical Change</i>	10.5	8.5	7.5	4.2	6.6
<i>Percent Change</i>	4.6%	3.6%	3.0%	1.6%	2.5%
Leisure & Hospitality	173.4	177.8	183.0	187.6	193.3
<i>Numerical Change</i>	-1.1	4.4	5.2	4.6	5.7
<i>Percent Change</i>	-0.6%	2.5%	2.9%	2.5%	3.0%
Other Services	64.0	63.9	61.9	61.6	61.6
<i>Numerical Change</i>	-4.2	-0.1	-2.0	-0.3	0.0
<i>Percent Change</i>	-6.2%	-0.2%	-3.1%	-0.5%	0.0%
Government	234.8	229.2	230.9	233.2	235.5
<i>Numerical Change</i>	-4.4	-5.6	1.7	2.3	2.4
<i>Percent Change</i>	-1.8%	-2.4%	0.7%	1.0%	1.0%

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

*Phoenix-Mesa-Glendale MSA includes all of Maricopa and Pinal Counties

Tucson MSA Employment Forecast

(In Thousands)

	Historical			Forecast	
	2010	2011	2012	2013	2014
Total Nonfarm Employment	354.0	355.5	360.8	367.0	374.9
<i>Numerical Change</i>	-7.8	1.5	5.3	6.2	7.8
<i>Percent Change</i>	-2.2%	0.4%	1.5%	1.7%	2.1%
Manufacturing	24.0	23.4	23.3	23.1	23.1
<i>Numerical Change</i>	-1.1	-0.6	-0.1	-0.2	0.0
<i>Percent Change</i>	-4.4%	-2.5%	-0.4%	-0.8%	0.0%
Natural Resources & Mining	1.8	1.9	2.1	2.4	2.5
<i>Numerical Change</i>	0.1	0.1	0.2	0.3	0.1
<i>Percent Change</i>	5.9%	5.6%	10.5%	14.3%	3.0%
Construction	15.0	14.5	14.3	15.5	16.8
<i>Numerical Change</i>	-1.6	-0.5	-0.2	1.2	1.3
<i>Percent Change</i>	-9.6%	-3.3%	-1.4%	8.3%	8.3%
Trade, Transportation, & Utilities	56.9	57.7	57.7	58.7	60.1
<i>Numerical Change</i>	-1.3	0.8	0.0	1.0	1.4
<i>Percent Change</i>	-2.2%	1.4%	0.0%	1.7%	2.4%
Information	4.3	4.2	4.3	4.3	4.3
<i>Numerical Change</i>	-0.4	-0.1	0.1	0.0	0.0
<i>Percent Change</i>	-8.5%	-2.3%	2.4%	-1.0%	0.0%
Financial Activities	18.9	18.8	18.9	19.5	19.9
<i>Numerical Change</i>	0.2	-0.1	0.1	0.6	0.4
<i>Percent Change</i>	1.1%	-0.5%	0.5%	3.0%	2.0%
Professional & Business Services	45.7	46.7	48.2	49.4	50.9
<i>Numerical Change</i>	-1.4	1.0	1.5	1.2	1.5
<i>Percent Change</i>	-3.0%	2.2%	3.2%	2.5%	3.0%
Educational & Health Services	58.3	59.8	61.0	61.9	63.2
<i>Numerical Change</i>	-0.2	1.5	1.2	0.9	1.3
<i>Percent Change</i>	-0.3%	2.6%	2.0%	1.5%	2.0%
Leisure & Hospitality	38.1	39.1	40.4	40.8	41.6
<i>Numerical Change</i>	-0.6	1.0	1.3	0.4	0.9
<i>Percent Change</i>	-1.6%	2.6%	3.3%	1.0%	2.1%
Other Services	12.7	12.5	12.7	12.6	12.6
<i>Numerical Change</i>	-0.7	-0.2	0.2	-0.1	0.0
<i>Percent Change</i>	-5.2%	-1.6%	1.6%	-1.0%	0.0%
Government	78.2	76.8	78.0	78.9	80.0
<i>Numerical Change</i>	-0.9	-1.4	1.2	0.9	1.0
<i>Percent Change</i>	-1.1%	-1.8%	1.6%	1.2%	1.3%

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

*Tucson MSA includes all of Pima County

Balance of State* Employment Forecast

(In Thousands)

	Historical			Forecast	
	2010	2011	2012	2013	2014
Total Nonfarm Employment	341.4	340.3	342.4	345.8	350.2
<i>Numerical Change</i>	-5.9	-1.1	2.1	3.4	4.4
<i>Percent Change</i>	-1.7%	-0.3%	0.6%	1.0%	1.3%
Manufacturing	13.8	14.3	14.9	15.2	15.5
<i>Numerical Change</i>	0.0	0.5	0.6	0.3	0.3
<i>Percent Change</i>	0.0%	3.6%	4.2%	2.0%	2.2%
Natural Resources & Mining	6.1	6.4	6.9	7.4	7.8
<i>Numerical Change</i>	-0.2	0.3	0.5	0.5	0.4
<i>Percent Change</i>	-3.2%	4.9%	7.8%	7.6%	4.7%
Construction	14.1	13.3	13.6	14.4	15.2
<i>Numerical Change</i>	-2.0	-0.8	0.3	0.8	0.8
<i>Percent Change</i>	-12.4%	-5.7%	2.3%	5.6%	5.8%
Trade, Transportation, & Utilities	65.0	65.3	64.0	64.0	64.3
<i>Numerical Change</i>	-0.9	0.3	-1.3	0.0	0.3
<i>Percent Change</i>	-1.4%	0.5%	-2.0%	-0.1%	0.5%
Information	4.7	4.4	4.4	4.5	4.5
<i>Numerical Change</i>	0.3	-0.3	0.0	0.1	0.0
<i>Percent Change</i>	6.8%	-6.4%	0.0%	1.3%	0.8%
Financial Activities	9.8	9.5	10.0	10.3	10.6
<i>Numerical Change</i>	-0.7	-0.3	0.5	0.3	0.3
<i>Percent Change</i>	-6.7%	-3.1%	5.3%	3.0%	2.6%
Professional & Business Services	23.4	22.8	22.5	23.1	23.8
<i>Numerical Change</i>	-0.6	-0.6	-0.3	0.6	0.7
<i>Percent Change</i>	-2.5%	-2.6%	-1.3%	2.5%	3.1%
Educational & Health Services	47.4	48.5	50.1	50.7	51.6
<i>Numerical Change</i>	0.6	1.1	1.6	0.6	0.9
<i>Percent Change</i>	1.3%	2.3%	3.3%	1.2%	1.8%
Leisure & Hospitality	42.4	42.4	43.3	43.9	45.0
<i>Numerical Change</i>	-0.4	0.0	0.9	0.6	1.0
<i>Percent Change</i>	-0.9%	0.0%	2.1%	1.5%	2.4%
Other Services	11.5	11.5	11.0	10.9	10.9
<i>Numerical Change</i>	-0.3	0.0	-0.5	-0.1	0.0
<i>Percent Change</i>	-2.5%	0.0%	-4.3%	-1.0%	0.0%
Government	103.3	102.1	101.8	101.5	101.1
<i>Numerical Change</i>	-1.4	-1.2	-0.3	-0.3	-0.4
<i>Percent Change</i>	-1.3%	-1.2%	-0.3%	-0.3%	-0.4%

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

*Balance of state includes all areas in Arizona outside of the Phoenix and Tucson Metro areas (MSAs)

Figure 3

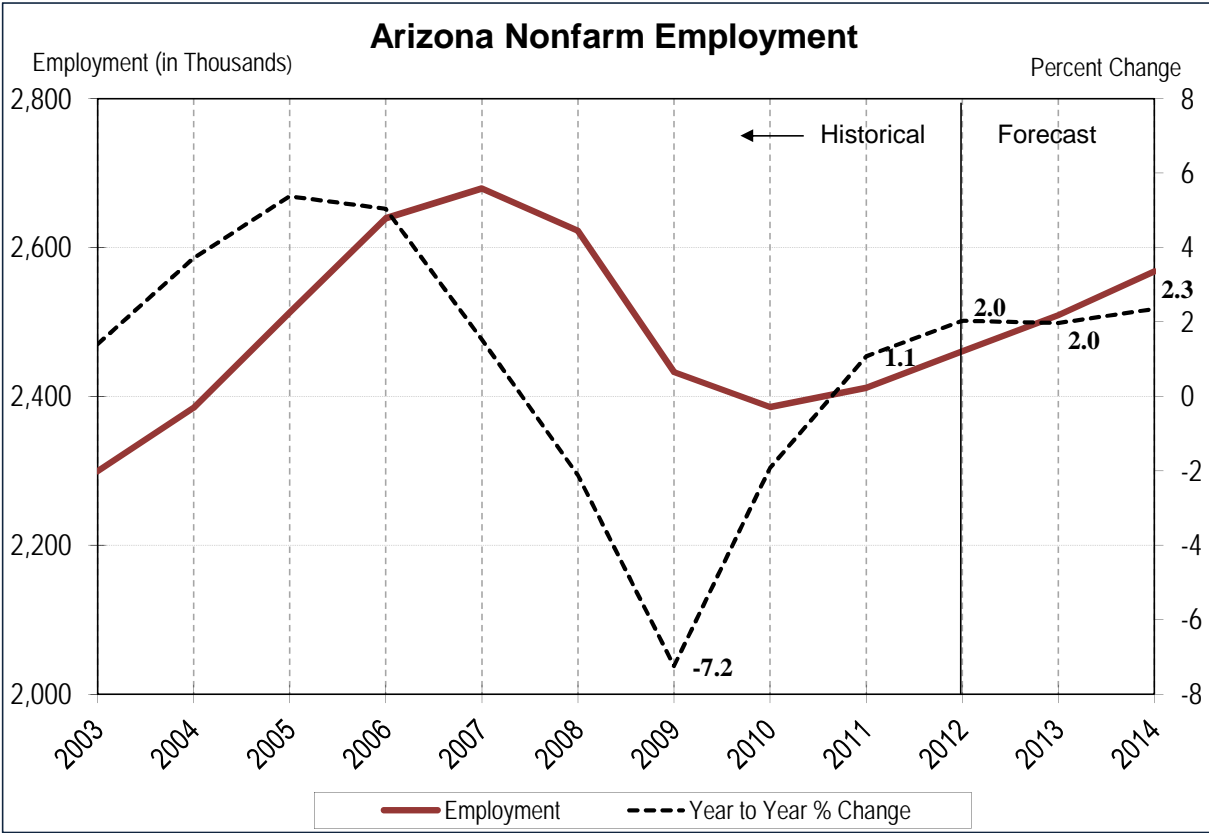


Figure 4

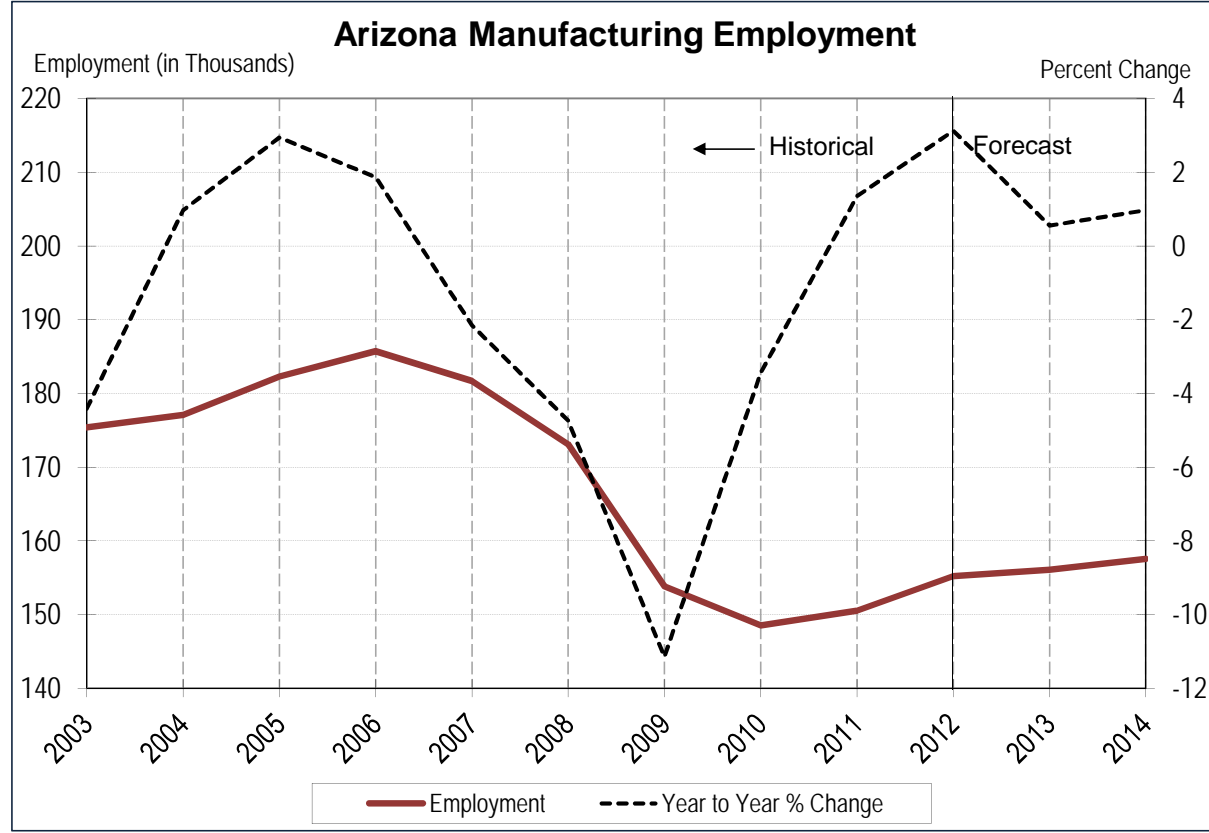


Figure 5

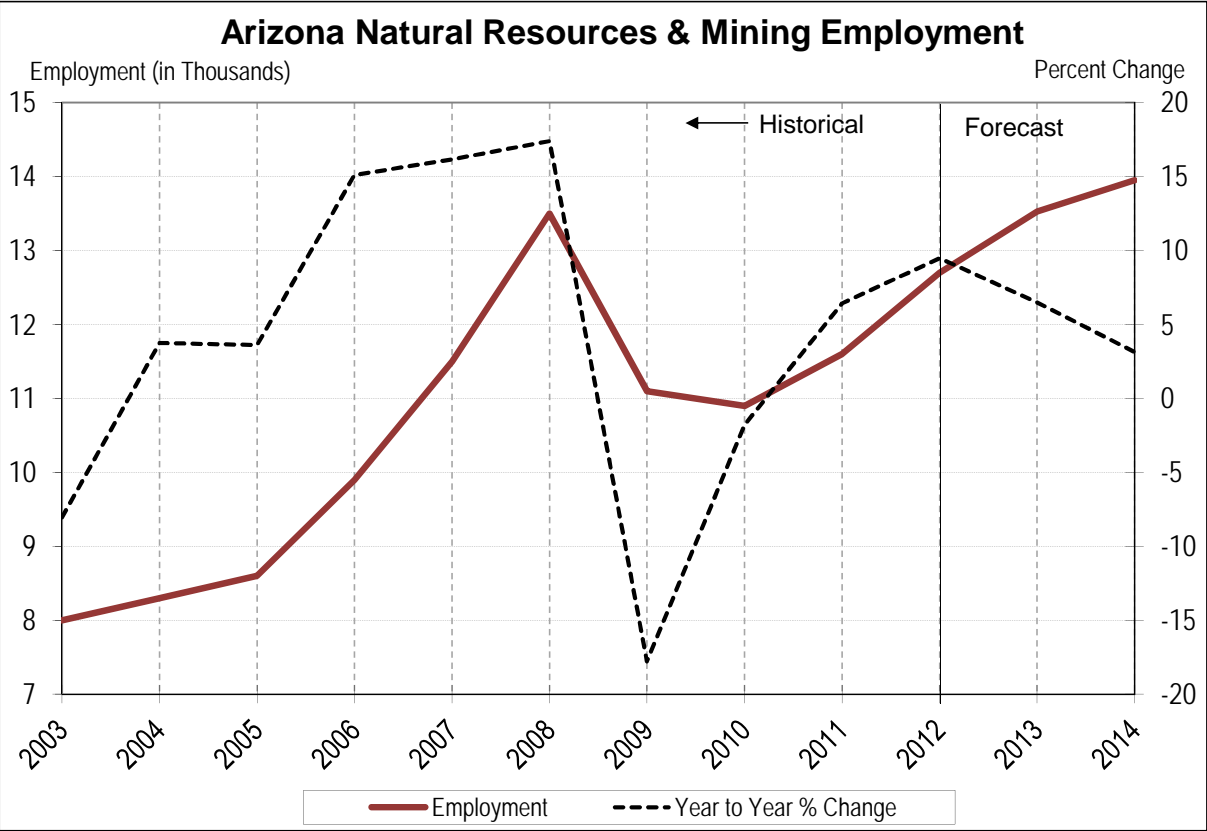


Figure 6

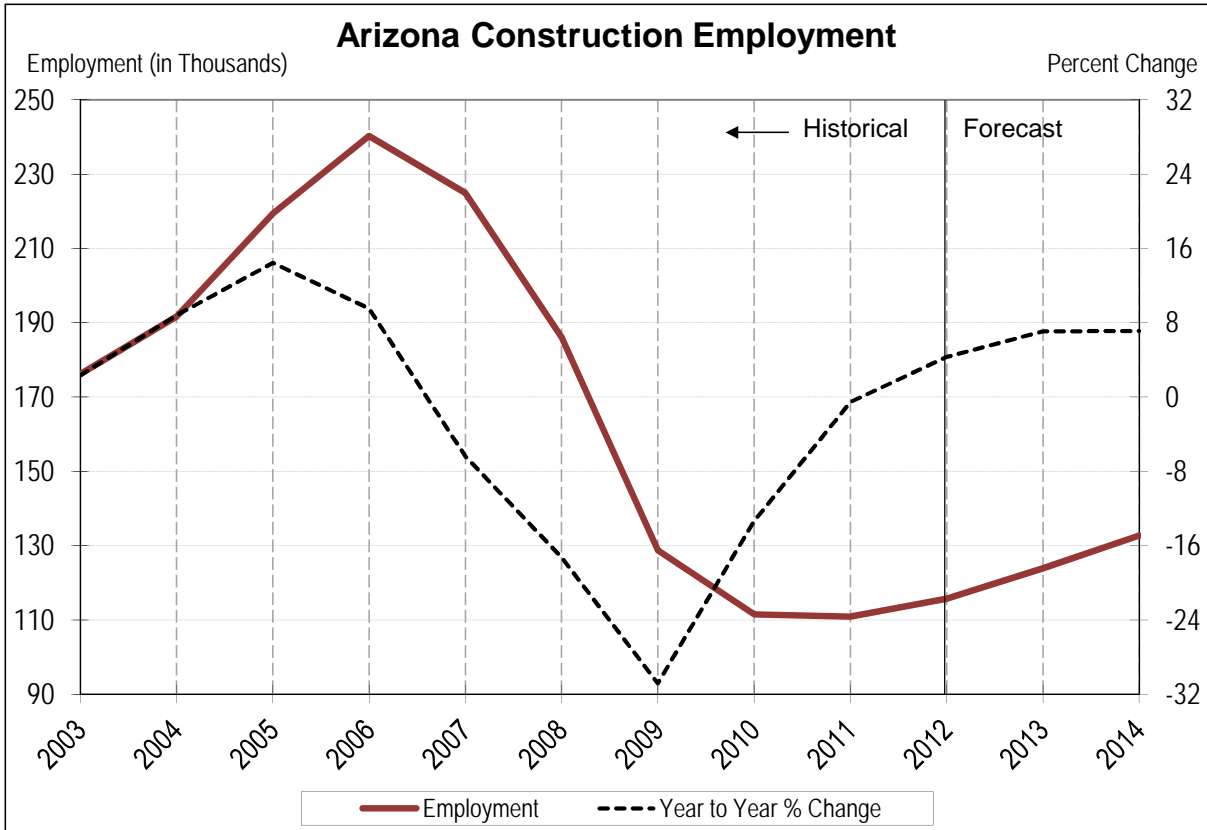


Figure 7

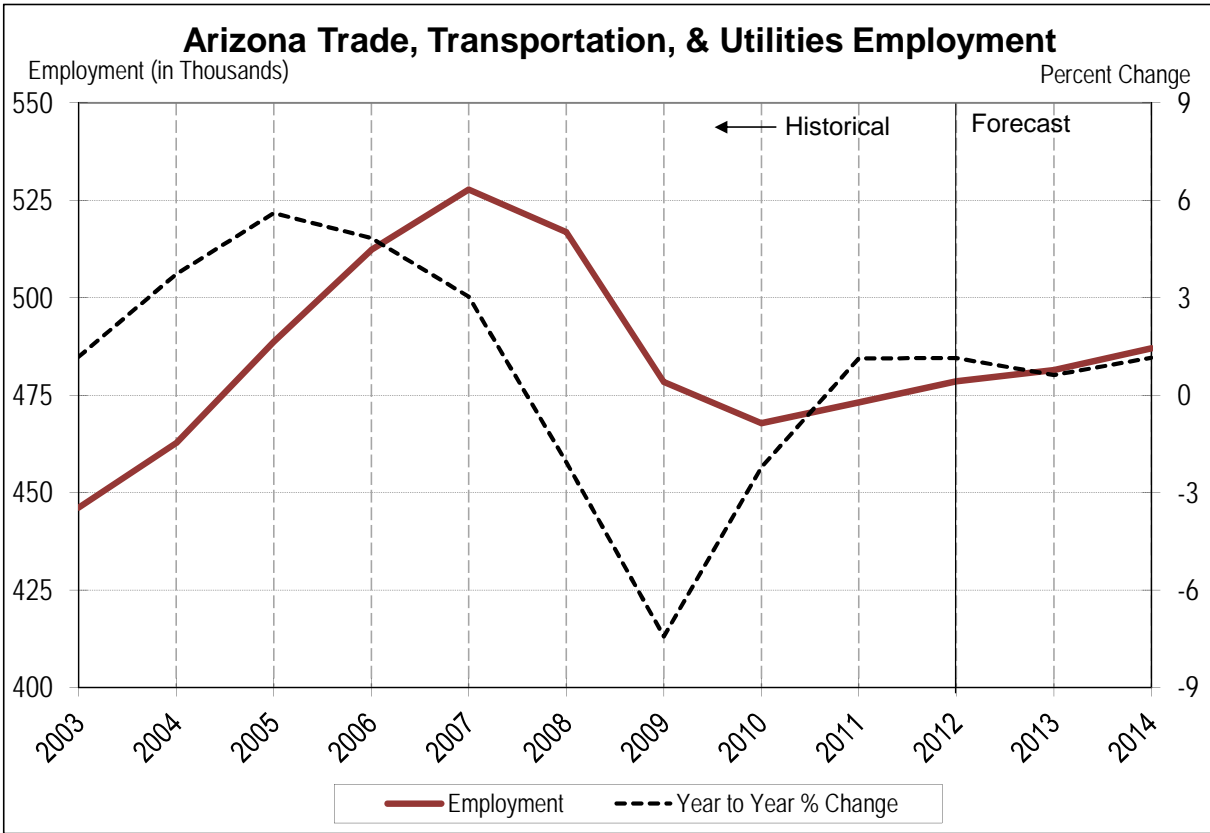


Figure 8

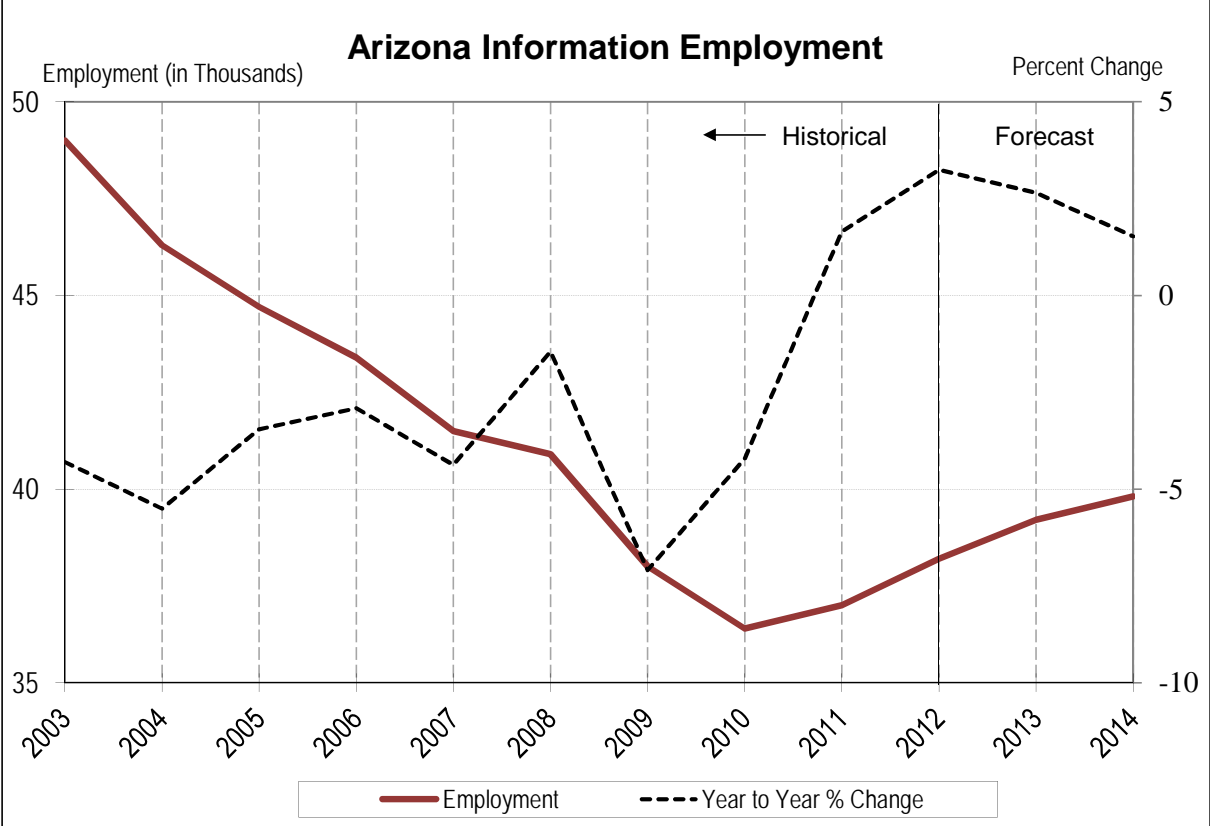


Figure 9

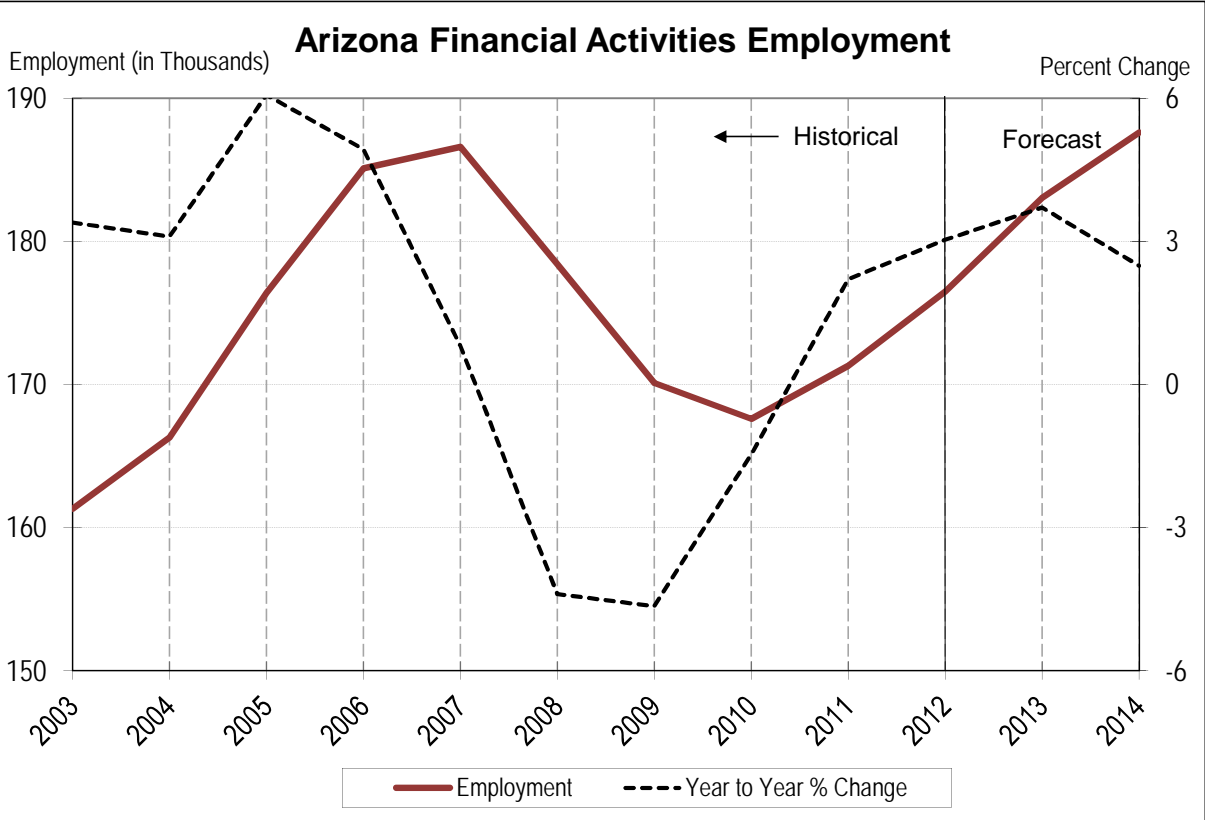


Figure 10

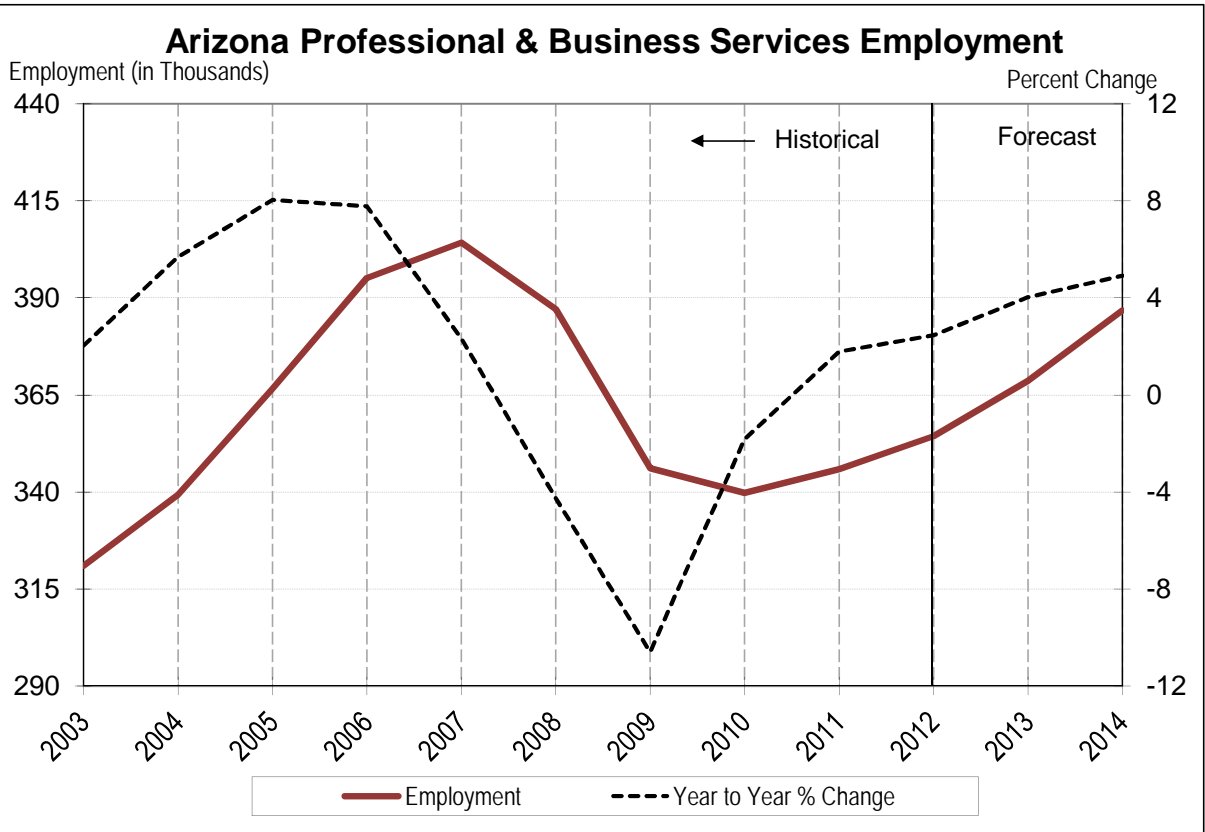


Figure 11

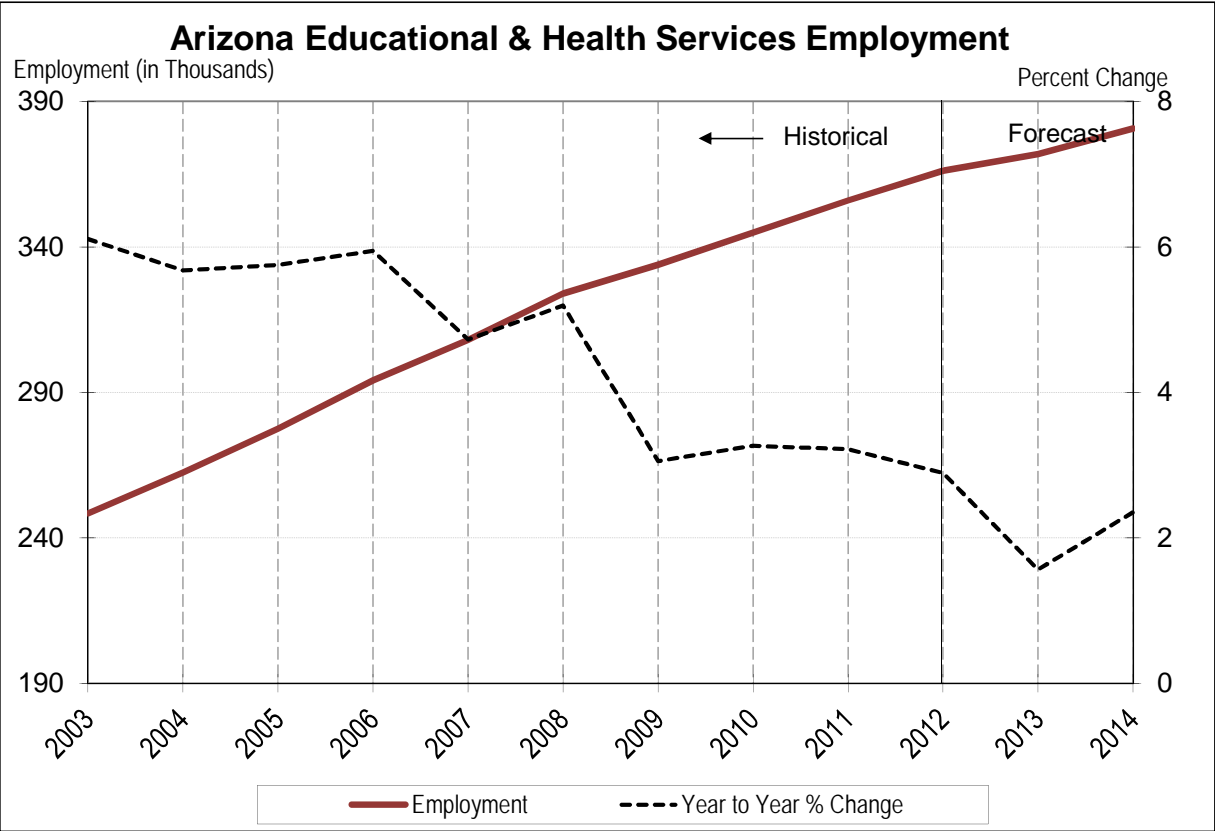


Figure 12

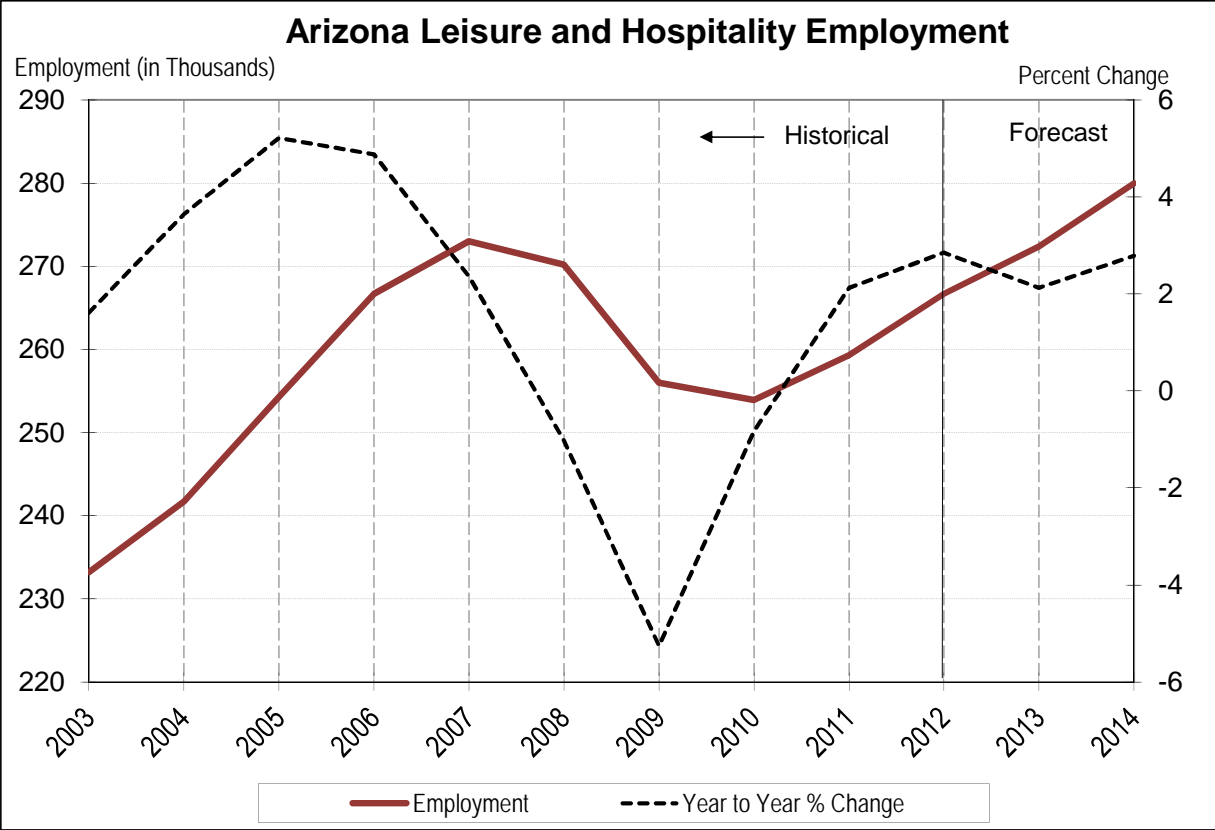


Figure 13

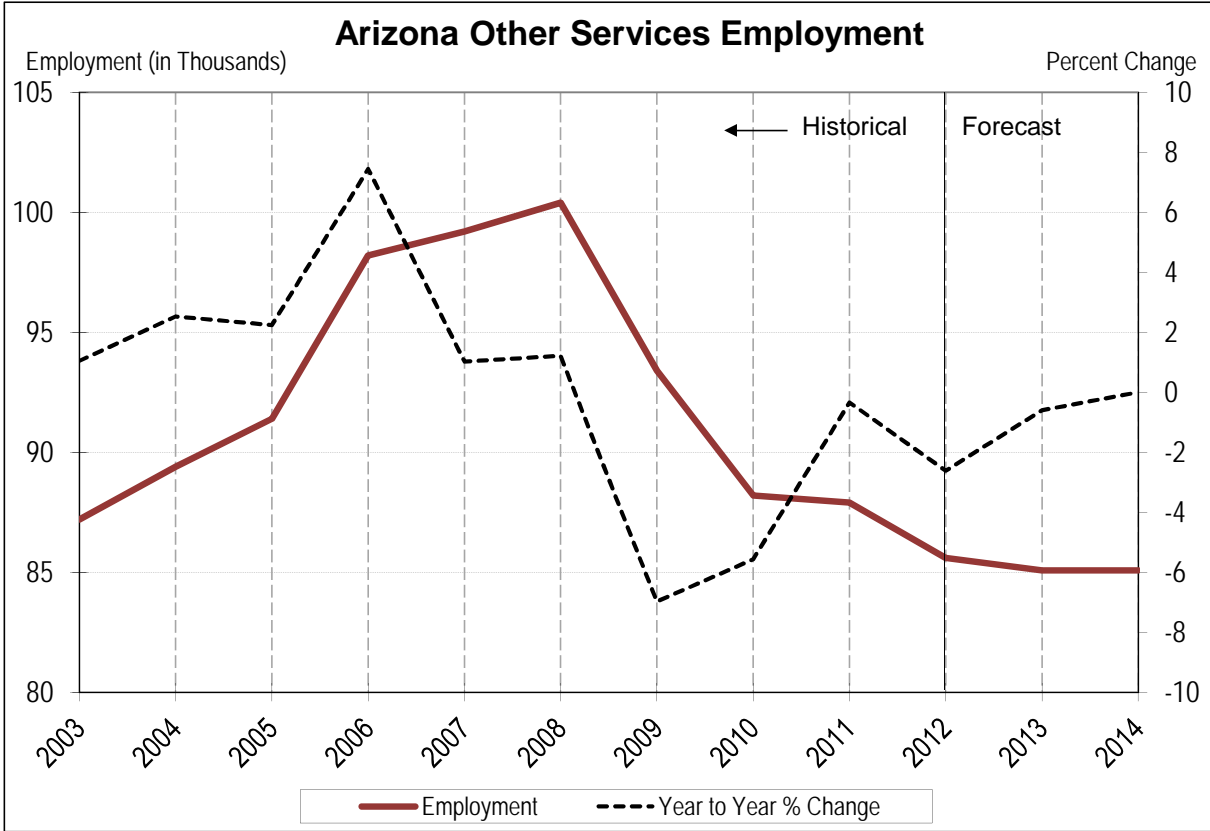
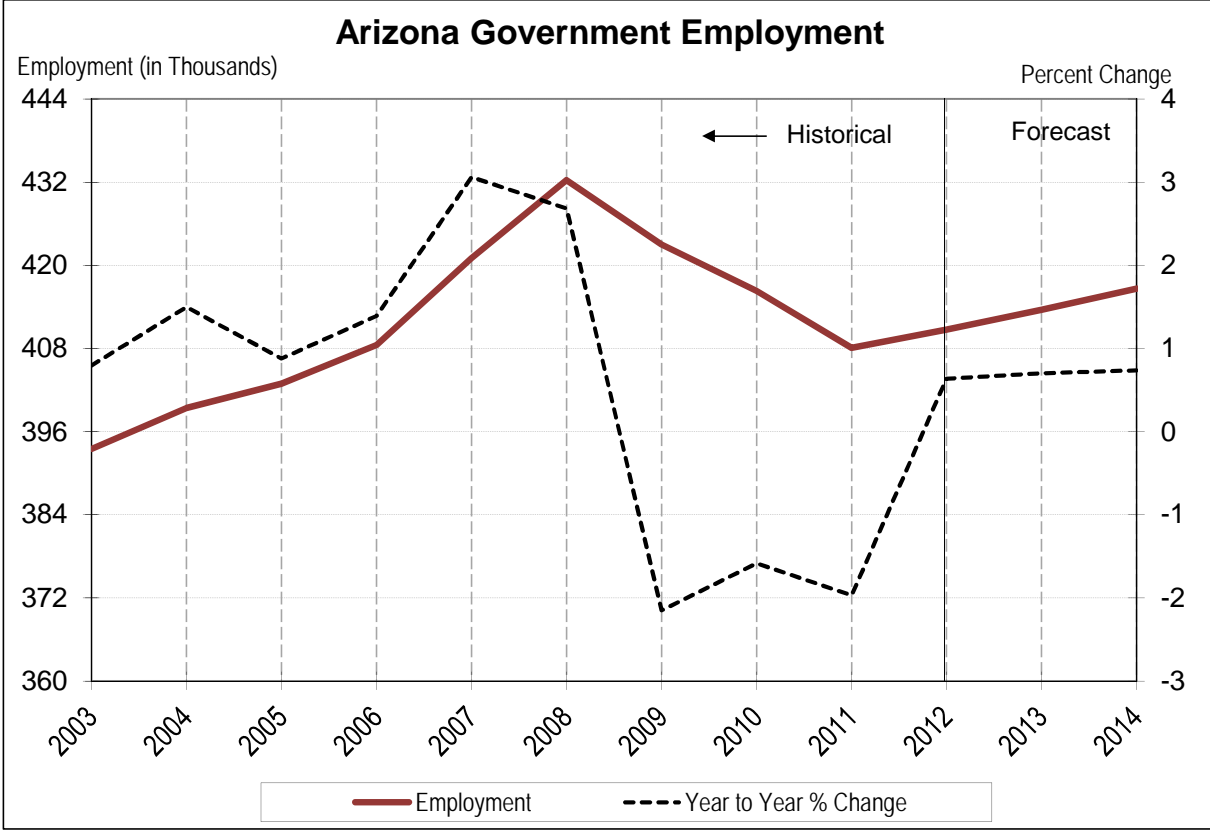


Figure 14



About This Publication

Arizona's Workforce is published 14 times a year by the State of Arizona Office of Employment and Population Statistics (EPS) — 12 times as the monthly Employment Report and twice a year as a two-year Forecast Report. EPS is the state agency responsible for labor market information and demographic data for the state of Arizona.

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